

09 / 886, 271

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssspta1653hxp

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2		"Ask CAS" for self-help around the clock
NEWS	3	SEP 09	CA/CAPLUS records now contain indexing from 1907 to the present
NEWS	4	DEC 08	INPADOC: Legal Status data reloaded
NEWS	5	SEP 29	DISSABS now available on STN
NEWS	6	OCT 10	PCTFULL: Two new display fields added
NEWS	7	OCT 21	BIOSIS file reloaded and enhanced
NEWS	8	OCT 28	BIOSIS file segment of TOXCENTER reloaded and enhanced
NEWS	9	NOV 24	MSDS-CCOHS file reloaded
NEWS	10	DEC 08	CABA reloaded with left truncation
NEWS	11	DEC 08	IMS file names changed
NEWS	12	DEC 09	Experimental property data collected by CAS now available in REGISTRY
NEWS	13	DEC 09	STN Entry Date available for display in REGISTRY and CA/CAPLUS
NEWS	14	DEC 17	DGENE: Two new display fields added
NEWS	15	DEC 18	BIOTECHNO no longer updated
NEWS	16	DEC 19	CROPU no longer updated; subscriber discount no longer available
NEWS	17	DEC 22	Additional INPI reactions and pre-1907 documents added to CAS databases
NEWS	18	DEC 22	IFIPAT/IFIUDB/IFICDB reloaded with new data and search fields
NEWS	19	DEC 22	ABI-INFORM now available on STN
NEWS	20	JAN 27	Source of Registration (SR) information in REGISTRY updated and searchable
NEWS	21	JAN 27	A new search aid, the Company Name Thesaurus, available in CA/CAPLUS
NEWS	22	FEB 05	German (DE) application and patent publication number format changes
NEWS	23	MAR 03	MEDLINE and LMEADLINE reloaded
NEWS	24	MAR 03	MEDLINE file segment of TOXCENTER reloaded
NEWS	25	MAR 03	FRANCEPAT now available on STN
NEWS EXPRESS			MARCH 5 CURRENT WINDOWS VERSION IS V7.00A, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 3 MARCH 2004
NEWS HOURS			STN Operating Hours Plus Help Desk Availability
NEWS INTER			General Internet Information
NEWS LOGIN			Welcome Banner and News Items
NEWS PHONE			Direct Dial and Telecommunication Network Access to STN
NEWS WWW			CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation

of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 13:10:45 ON 12 MAR 2004

=> file medline, biosis, biobusiness, wpids, fsta, jicst, embase, dgene, uspatful		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'MEDLINE' ENTERED AT 13:11:13 ON 12 MAR 2004

FILE 'BIOSIS' ENTERED AT 13:11:13 ON 12 MAR 2004  
COPYRIGHT (C) 2004 BIOLOGICAL ABSTRACTS INC. (R)

FILE 'BIOBUSINESS' ENTERED AT 13:11:13 ON 12 MAR 2004  
COPYRIGHT (C) 2004 Biological Abstracts, Inc. (BIOSIS)

FILE 'WPIDS' ENTERED AT 13:11:13 ON 12 MAR 2004  
COPYRIGHT (C) 2004 THOMSON DERWENT

FILE 'FSTA' ENTERED AT 13:11:13 ON 12 MAR 2004  
COPYRIGHT (C) 2004 International Food Information Service

FILE 'JICST-EPLUS' ENTERED AT 13:11:13 ON 12 MAR 2004  
COPYRIGHT (C) 2004 Japan Science and Technology Agency (JST)

FILE 'EMBASE' ENTERED AT 13:11:13 ON 12 MAR 2004  
COPYRIGHT (C) 2004 Elsevier Inc. All rights reserved.

FILE 'DGENE' ENTERED AT 13:11:13 ON 12 MAR 2004  
COPYRIGHT (C) 2004 THOMSON DERWENT

FILE 'USPATFULL' ENTERED AT 13:11:13 ON 12 MAR 2004  
CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

=> s protein marker  
L1 2389 PROTEIN MARKER

=> s obesity  
L2 368909 OBESITY

=> s hypertension  
L3 845017 HYPERTENSION

=> s diabetes  
L4 1028410 DIABETES

=> s osteoarthritis  
L5 270109 OSTEOARTHRITIS

=> s osteoporosis  
L6 232226 OSTEOPOROSIS

=> s l1 an dl2  
MISSING OPERATOR L1 AN  
The search profile that was entered contains terms or nested terms that are not separated by a logical operator.

=> s l1 and l2  
L7 218 L1 AND L2

=> s l1 () l3  
L8 0 L1 (W) L3

=> s l1 and l3  
L9 267 L1 AND L3

=> s l1 and l4  
L10 308 L1 AND L4

=> s l1 and l5  
L11 226 L1 AND L5

=> s l1 and l6  
L12 209 L1 AND L6

=> s l7 and non-genetic  
L13 8 L7 AND NON-GENETIC

=> d l13 ti abs ibib tot

L13 ANSWER 1 OF 8 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN  
TI New **non-genetic** based protein disease markers for  
**obesity**, osteoporosis, diabetes, osteoarthritis and hypertension,  
useful in diagnosis and monitoring of treatment for these diseases and to  
screen for therapeutic compounds.  
AN 2002-362307 [39] WPIDS  
AB WO 200222165 A UPAB: 20020621  
NOVELTY - **Non-genetic** based protein disease markers  
for **obesity**, osteoporosis, diabetes, osteoarthritis and  
hypertension, are new.  
DETAILED DESCRIPTION - **Non-genetic** based protein  
disease markers for **obesity**, osteoporosis, diabetes,  
osteoarthritis and hypertension, are new, where markers for **obesity**  
(n=34), osteoporosis (n=20), diabetes (n=9), osteoarthritis (n=1) and  
hypertension (n=9) are listed in the specification.  
INDEPENDENT CLAIMS are also included for the following:  
(1) determining a disease state of a subject suspected of having  
**obesity**, osteoporosis, diabetes, osteoarthritis or hypertension  
comprising:  
(a) obtaining a sample containing protein;  
(b) measuring levels of protein markers of the disease state, where  
the markers are given in the specification; and  
(c) comparing with levels in controls from disease-free  
subjects/control standards;  
(2) binding reagents specific for the proteins, optionally bound to a  
detectable label;  
(3) a standardized two-dimensional electrophoretic protein  
distribution from a sample (optionally human serum) from a subject having  
**obesity**, osteoporosis, diabetes, osteoarthritis or hypertension  
(and optionally being treated with pharmaceuticals);  
(4) protein markers comprising a composition of two or more proteins  
which individually do not have significantly different levels between  
disease/control samples in a method as in (1), but produce a combined  
value which is significantly different, and methods and binding reagents  
as in (1) and (2) relating to the markers;  
(5) protein submarkers not altered statistically significantly in the  
method as in (1) but altered in tandem/opposite in level and direction to  
protein markers, and methods and binding reagents as in (1) and (2)  
relating to the markers;  
(6) generating an index marker for a particular physiological state  
comprising:  
(a) determining protein markers that differ between samples from a  
subject with a disease state and a control sample;  
(b) selecting two or more of the markers;

(c) combining the values for the markers and determining where the combination of values is altered in a manner of greater statistical significance;

(7) index markers comprising two or more protein markers determined by (6);

(8) cloning a gene encoding a **protein marker** comprising:

(a) determining a partial amino acid sequence of the protein;

(b) deducing a nucleotide sequence for a gene encoding the protein;

and

(c) isolating or synthesizing a gene encoding the nucleotide sequence; and

(9) polynucleotides encoding the proteins, and antisense sequences inhibiting gene expression.

ACTIVITY - Anorectic; osteopathic; antidiabetic; antiarthritic; hypotensive. No biological data is given.

MECHANISM OF ACTION - None given.

USE - The markers and a new method are useful to diagnose **obesity**, osteoporosis, diabetes, osteoarthritis or hypertension in individuals. Marker levels may also be used to determine disease severity. The markers and method can also be used to monitor the efficacy of therapy for the conditions, by comparing marker levels between samples from a subject taken at different times. The markers identified may also be drug development targets for the diseases. The protein markers can be used to screen compounds for biological activity against the diseases, which may be included with a carrier in pharmaceutical compositions useful to treat the disease states. The markers are useful to screen candidate compounds for detection of or therapeutic activity against disease states, and to identify biological pathways involved in disease states. They are also useful to identify synergistic agents which may be included in pharmaceutical compositions (all claimed).

Dwg.0/10

ACCESSION NUMBER: 2002-362307 [39] WPIDS  
DOC. NO. CPI: C2002-102544  
TITLE: New **non-genetic** based protein disease markers for **obesity**, osteoporosis, diabetes, osteoarthritis and hypertension, useful in diagnosis and monitoring of treatment for these diseases and to screen for therapeutic compounds.  
DERWENT CLASS: B04 D16  
INVENTOR(S): ANDERSON, N L; MYERS, T G; PIEPER, R; STEINER, S; TAYLOR, J; MYERS, T; REMBERT, P  
PATENT ASSIGNEE(S): (ANDE-I) ANDERSON N L; (MYER-I) MYERS T G; (PIEP-I) PIEPER R; (STEI-I) STEINER S; (TAYL-I) TAYLOR J; (LARG-N) LARGE SCALE PROTEOMICS CORP  
COUNTRY COUNT: 97  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002022165	A1	20020321	(200239)*	EN	63
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
US 2002072492	A1	20020613	(200243)		
AU 2001088973	A	20020326	(200251)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
-----------	------	-------------	------

WO 2002022165 A1  
US 2002072492 A1 CIP of  
AU 2001088973 A

WO 2001-US28268 20010912  
US 2000-660242 20000912  
US 2001-886271 20010622  
AU 2001-88973 20010912

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001088973 A	Based on	WO 2002022165

PRIORITY APPLN. INFO: US 2001-886271 20010622; US 2000-660242  
20000912

L13 ANSWER 2 OF 8 USPATFULL on STN

TI Novel 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 and 49933 molecules and uses therefor

AB The invention provides isolated nucleic acids molecules, designated 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 and 49933 nucleic acid molecules. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 gene has been introduced or disrupted. The invention still further provides isolated 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 proteins, fusion proteins, antigenic peptides and anti-25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 antibodies. Diagnostic and therapeutic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:12981 USPATFULL

TITLE: Novel 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 and 49933 molecules and uses therefor

INVENTOR(S): Curtis, Rory A. J., Ashland, MA, UNITED STATES  
Logan, Thomas Joseph, Springfield, PA, UNITED STATES  
Glucksmann, Maria Alexandra, Lexington, MA, UNITED STATES  
Meyers, Rachel E., Newton, MA, UNITED STATES  
Williamson, Mark J., Saugus, MA, UNITED STATES  
Rudolph-Owen, Laura A., Medford, MA, UNITED STATES  
Chun, Miyoung, Belmont, MA, UNITED STATES  
Tsai, Fong-Ying, Newton, MA, UNITED STATES

PATENT ASSIGNEE(S): Millennium Pharmaceuticals, Inc. (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004009501	A1	20040115
APPLICATION INFO.:	US 2003-377072	A1	20030227 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2001-895860, filed on 29 Jun 2001, PENDING Continuation-in-part of Ser. No. US 2000-723806, filed on 28 Nov 2000, PENDING Continuation-in-part of Ser. No. US 2001-843297, filed on 25 Apr 2001, GRANTED, Pat. No. US 6569667 Continuation-in-part of Ser. No. US 2001-861801, filed on 21 May 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-816494, filed on 23 Mar 2001, PENDING Continuation-in-part of Ser. No. US 2001-888911, filed on 25 Jun 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-908664, filed on 17 Jul 2001, ABANDONED		

Continuation-in-part of Ser. No. US 2001-935291, filed  
on 21 Aug 2001, ABANDONED

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-215370P	20000629 (60)
	US 2000-187455P	20000307 (60)
	US 2000-199801P	20000426 (60)
	US 2000-205508P	20000519 (60)
	US 2000-213688P	20000623 (60)
	US 2000-218675P	20000717 (60)
	US 2000-250932P	20001130 (60)
	US 2000-226504P	20000821 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Jean M. Silveri, 75 Sidney Street, Cambridge, MA, 02139	
NUMBER OF CLAIMS:	19	
EXEMPLARY CLAIM:	1	
LINE COUNT:	16123	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L13 ANSWER 3 OF 8 USPATFULL on STN

TI Novel 38594, 57312, 53659, 57250, 63760, 49938, 32146, 57259, 67118,  
67067, 62092, 8099, 46455, 54414, 53763, 67076, 67102, 44181, 67084FL,  
67084ALT, FBH58295FL, 57255, and 57255alt molecules and uses therefor

AB The invention provides isolated nucleic acids molecules, designated  
38594, 57312, 53659, 57250, 63760, 49938, 32146, 57259, 67118, 67067,  
62092, 8099, 46455, 54414, 53763, 67076, 67102, 44181, 67084FL,  
67084ALT, FBH58295FL, 57255, and 57255alt nucleic acid molecules, which  
encode transporter molecules, including sugar transporters, organic  
anion transporters, amino acid transporters, and phospholipid  
transporters. The invention also provides antisense nucleic acid  
molecules, recombinant expression vectors containing 38594, 57312,  
53659, 57250, 63760, 49938, 32146, 57259, 67118, 67067, 62092, 8099,  
46455, 54414, 53763, 67076, 67102, 44181, 67084FL, 67084ALT, FBH58295FL,  
57255, and 57255alt nucleic acid molecules, host cells into which the  
expression vectors have been introduced, and non-human transgenic  
animals in which a 38594, 57312, 53659, 57250, 63760, 49938, 32146,  
57259, 67118, 67067, 62092, 8099, 46455, 54414, 53763, 67076, 67102,  
44181, 67084FL, 67084ALT, FBH58295FL, 57255, and 57255alt gene has been  
introduced or disrupted. The invention still further provides isolated  
38594, 57312, 53659, 57250, 63760, 49938, 32146, 57259, 67118, 67067,  
62092, 8099, 46455, 54414, 53763, 67076, 67102, 44181, 67084FL,  
67084ALT, FBH58295FL, 57255, and 57255alt polypeptides, fusion  
polypeptides, antigenic peptides and anti-38594, 57312, 53659, 57250,  
63760, 49938, 32146, 57259, 67118, 67067, 62092, 8099, 46455, 54414,  
53763, 67076, 67102, 44181, 67084FL, 67084ALT, FBH58295FL, 57255, and  
57255alt antibodies. Diagnostic and therapeutic methods utilizing  
compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:207317 USPATFULL

TITLE: Novel 38594, 57312, 53659, 57250, 63760, 49938, 32146,  
57259, 67118, 67067, 62092, 8099, 46455, 54414, 53763,  
67076, 67102, 44181, 67084FL, 67084ALT, FBH58295FL,  
57255, and 57255alt molecules and uses therefor

INVENTOR(S): Curtis, Rory A.J., Framingham, MA, UNITED STATES  
Glucksmann, Maria Alexandra, Lexington, MA, UNITED  
STATES  
Meyers, Rachel E., Newton, MA, UNITED STATES

PATENT ASSIGNEE(S): Millennium Pharmaceuticals, Inc., Cambridge, MA (U.S.  
corporation)

NUMBER	KIND	DATE
--------	------	------



-----

PATENT INFORMATION: US 2003143675 A1 20030731  
 APPLICATION INFO.: US 2002-154419 A1 20020522 (10)  
 RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2001-858194, filed  
 on 14 May 2001, PENDING Continuation-in-part of Ser.  
 No. US 2001-895811, filed on 29 Jun 2001, PENDING  
 Continuation-in-part of Ser. No. US 2001-919781, filed  
 on 31 Jul 2001, PENDING Continuation-in-part of Ser.  
 No. US 2001-957664, filed on 19 Sep 2001, PENDING  
 Continuation-in-part of Ser. No. US 2001-964295, filed  
 on 25 Sep 2001, PENDING Continuation-in-part of Ser.  
 No. US 2001-972724, filed on 5 Oct 2001, PENDING  
 Continuation-in-part of Ser. No. US 2001-2769, filed on  
 14 Nov 2001, PENDING Continuation-in-part of Ser. No.  
 US 2001-24623, filed on 17 Dec 2001, PENDING  
 Continuation-in-part of Ser. No. US 2002-55025, filed  
 on 22 Jan 2002, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-204211P	20000512 (60)
	US 2000-215376P	20000629 (60)
	US 2000-221769P	20000731 (60)
	US 2000-233790P	20000919 (60)
	US 2000-235107P	20000925 (60)
	US 2000-238336P	20001005 (60)
	US 2000-248364P	20001114 (60)
	US 2000-248878P	20001115 (60)
	US 2000-256240P	20001215 (60)
	US 2000-256588P	20001218 (60)
	US 2000-258028P	20001221 (60)
	US 2001-263169P	20010122 (60)
	US 2001-263169P	20010122 (60)

DOCUMENT TYPE: Utility  
 FILE SEGMENT: APPLICATION  
 LEGAL REPRESENTATIVE: Intellectual Property Group, MILLENNIUM  
 PHARMACEUTICALS, INC., 75 Sidney Street, Cambridge, MA,  
 02139

NUMBER OF CLAIMS: 23  
 EXEMPLARY CLAIM: 1  
 NUMBER OF DRAWINGS: 252 Drawing Page(s)  
 LINE COUNT: 45817  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 4 OF 8 USPATFULL on STN

TI 68723, sodium/glucose cotransporter family members and uses therefor  
 AB The invention provides isolated nucleic acids molecules, designated  
 68723 nucleic acid molecules, which encode novel sodium/glucose  
 cotransporter family members. The invention also provides antisense  
 nucleic acid molecules, recombinant expression vectors containing 68723  
 nucleic acid molecules, host cells into which the expression vectors  
 have been introduced, and nonhuman transgenic animals in which a 68723  
 gene has been introduced or disrupted. The invention still further  
 provides isolated 68723 proteins, fusion proteins, antigenic peptides  
 and anti-68723 antibodies. Diagnostic and therapeutic methods utilizing  
 compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:78533 USPATFULL  
 TITLE: 68723, sodium/glucose cotransporter family members and  
 uses therefor  
 INVENTOR(S): Curtis, Rory A.J., Framingham, MA, UNITED STATES  
 Chen, Hong, Newton, MA, UNITED STATES  
 PATENT ASSIGNEE(S): Millennium Pharmaceuticals, Inc. (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003054453	A1	20030320
APPLICATION INFO.:	US 2002-119988	A1	20020410 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-282764P	20010410 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Jean M. Silveri, MILLENNIUM PHARMACEUTICALS, INC., 75 Sidney Street, Cambridge, MA, 02139	
NUMBER OF CLAIMS:	43	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	3 Drawing Page(s)	
LINE COUNT:	6315	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 5 OF 8 USPATFULL on STN

TI 18607, a novel human calcium channel

AB The invention provides isolated nucleic acids molecules, designated TLCC nucleic acid molecules, which encode novel TRP-like calcium channel molecules. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing TLCC nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a TLCC gene has been introduced or disrupted. The invention still further provides isolated TLCC proteins, fusion proteins, antigenic peptides and anti-TLCC antibodies. Diagnostic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:258807 USPATFULL

TITLE: 18607, a novel human calcium channel

INVENTOR(S): Glucksmann, Maria Alexandra, Lexington, MA, UNITED STATES  
Curtis, Rory A.J., Southborough, MA, UNITED STATES  
Lora, Jose M., Arlington, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002142377	A1	20021003
APPLICATION INFO.:	US 2001-789481	A1	20010220 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2000-634669, filed on 8 Aug 2000, PENDING Continuation-in-part of Ser. No. US 2000-583373, filed on 31 May 2000, PENDING Continuation-in-part of Ser. No. US 2000-510706, filed on 22 Feb 2000, PENDING		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109		
NUMBER OF CLAIMS:	44		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	26 Drawing Page(s)		
LINE COUNT:	5230		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 6 OF 8 USPATFULL on STN

TI 25869, a novel human carboxylesterase and uses thereof

AB The invention provides isolated nucleic acid molecules, designated COE-1 nucleic acid molecules, which encode novel carboxylesterase family members. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing COE-1 nucleic acid molecules, host cells into which the expression vectors have been introduced, and



nonhuman transgenic animals in which a COE-1 gene has been introduced or disrupted. The invention still further provides isolated COE-1 proteins, fusion proteins, antigenic peptides and anti-COE-1 antibodies. Diagnostic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:148643 USPATFULL  
TITLE: 25869, a novel human carboxylesterase and uses thereof  
INVENTOR(S): Curtis, Rory A.J., Southborough, MA, UNITED STATES  
Logan, Thomas Joseph, Needham, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002076786	A1	20020620
APPLICATION INFO.:	US 2001-895860	A1	20010629 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-215370P	20000629 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109	
NUMBER OF CLAIMS:	32	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	9 Drawing Page(s)	
LINE COUNT:	5139	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 7 OF 8 USPATFULL on STN

TI **Non-genetic** based protein disease markers  
AB Protein disease markers for **obesity**, osteoporosis, diabetes, osteoarthritis and hypertension are disclosed. These markers are not inherited or of genetic origin as they were not found in identical twins of the affected individual. Methods and uses for diagnostic, therapeutic and drug discovery are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:141506 USPATFULL  
TITLE: **Non-genetic** based protein disease markers  
INVENTOR(S): Myers, Timothy G., Kensington, MD, UNITED STATES  
Pieper, Rembert, Washington, DC, UNITED STATES  
Taylor, John, JR., Clayton, NC, UNITED STATES  
Steiner, Sandra, Gaithersburg, MD, UNITED STATES  
Anderson, N. Leigh, Washington, DC, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002072492	A1	20020613
APPLICATION INFO.:	US 2001-886271	A1	20010622 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2000-660242, filed on 12 Sep 2000, PENDING		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	Dean H. Nakamura, Roylance Abrams Berdo & Goodman, 1300 19th Street, N.W., Washington, DC, 20036		
NUMBER OF CLAIMS:	55		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	10 Drawing Page(s)		
LINE COUNT:	1425		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 8 OF 8 USPATFULL on STN

TI Methods and compositions for elucidating relative protein expression levels in cells

AB The present invention relates generally to methods and compositions for the identification of differential protein expression patterns and concomitantly the active genetic regions that are directly or indirectly involved in different tissue types, disease states, or other cellular differences desirable for diagnosis or for targets for drug therapy.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2001:188396 USPATFULL

TITLE: Methods and compositions for elucidating relative protein expression levels in cells

INVENTOR(S): Link, Charles J., Des Moines, IA, United States  
Seregina, Tatiana, Ames, IA, United States  
Vahanian, Nicholas N., Ames, IA, United States  
Higginbotham, James N., Ames, IA, United States  
Ramsey, W. Jay, Ames, IA, United States  
Powers, Bradley J., Ames, IA, United States  
Shulka, Sachet A., Ames, IA, United States  
Young, Won Bin, Ames, IA, United States

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2001034028	A1	20011025
APPLICATION INFO.:	US 2001-811842	A1	20010319 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-190678P	20000320 (60)
	US 2000-198722P	20000420 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	ZARLEY MCKEE THOMTE VOORHEES & SEASE PLC, SUITE 3200, 801 GRAND AVENUE, DES MOINES, IA, 50309-2721	
NUMBER OF CLAIMS:	52	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	23 Drawing Page(s)	
LINE COUNT:	2290	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d his

(FILE 'HOME' ENTERED AT 13:10:45 ON 12 MAR 2004)

FILE 'MEDLINE, BIOSIS, BIOBUSINESS, WPIDS, FSTA, JICST-EPLUS, EMBASE, DGENE, USPATFULL' ENTERED AT 13:11:13 ON 12 MAR 2004

L1 2389 S PROTEIN MARKER

L2 368909 S OBESITY

L3 845017 S HYPERTENSION

L4 1028410 S DIABETES

L5 270109 S OSTEOARTHRITIS

L6 232226 S OSTEOPOROSIS

L7 218 S L1 AND L2

L8 0 S L1 () L3

L9 267 S L1 AND L3

L10 308 S L1 AND L4

L11 226 S L1 AND L5

L12 209 S L1 AND L6

L13 8 S L7 AND NON-GENETIC

=> s l9 and NON-GENETIC

1 FILES SEARCHED...

L14 9 L9 AND NON-GENETIC

=> d 114 ti abs ibib tot

L14 ANSWER 1 OF 9 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

TI New **non-genetic** based protein disease markers for obesity, osteoporosis, diabetes, osteoarthritis and **hypertension**, useful in diagnosis and monitoring of treatment for these diseases and to screen for therapeutic compounds.

AN 2002-362307 [39] WPIDS

AB WO 200222165 A UPAB: 20020621

NOVELTY - **Non-genetic** based protein disease markers for obesity, osteoporosis, diabetes, osteoarthritis and **hypertension**, are new.

DETAILED DESCRIPTION - **Non-genetic** based protein disease markers for obesity, osteoporosis, diabetes, osteoarthritis and **hypertension**, are new, where markers for obesity (n=34), osteoporosis (n=20), diabetes (n=9), osteoarthritis (n=1) and **hypertension** (n=9) are listed in the specification.

INDEPENDENT CLAIMS are also included for the following:

(1) determining a disease state of a subject suspected of having obesity, osteoporosis, diabetes, osteoarthritis or **hypertension** comprising:

(a) obtaining a sample containing protein;  
(b) measuring levels of protein markers of the disease state, where the markers are given in the specification; and  
(c) comparing with levels in controls from disease-free subjects/control standards;

(2) binding reagents specific for the proteins, optionally bound to a detectable label;

(3) a standardized two-dimensional electrophoretic protein distribution from a sample (optionally human serum) from a subject having obesity, osteoporosis, diabetes, osteoarthritis or **hypertension** (and optionally being treated with pharmaceuticals);

(4) protein markers comprising a composition of two or more proteins which individually do not have significantly different levels between disease/control samples in a method as in (1), but produce a combined value which is significantly different, and methods and binding reagents as in (1) and (2) relating to the markers;

(5) protein submarkers not altered statistically significantly in the method as in (1) but altered in tandem/opposite in level and direction to protein markers, and methods and binding reagents as in (1) and (2) relating to the markers;

(6) generating an index marker for a particular physiological state comprising:

(a) determining protein markers that differ between samples from a subject with a disease state and a control sample;

(b) selecting two or more of the markers;

(c) combining the values for the markers and determining where the combination of values is altered in a manner of greater statistical significance;

(7) index markers comprising two or more protein markers determined by (6);

(8) cloning a gene encoding a **protein marker** comprising:

(a) determining a partial amino acid sequence of the protein;

(b) deducing a nucleotide sequence for a gene encoding the protein;

and

(c) isolating or synthesizing a gene encoding the nucleotide sequence; and

(9) polynucleotides encoding the proteins, and antisense sequences inhibiting gene expression.

ACTIVITY - Anorectic; osteopathic; antidiabetic; antiarthritic; hypotensive. No biological data is given.

MECHANISM OF ACTION - None given.

USE - The markers and a new method are useful to diagnose obesity, osteoporosis, diabetes, osteoarthritis or **hypertension** in individuals. Marker levels may also be used to determine disease severity. The markers and method can also be used to monitor the efficacy of therapy for the conditions, by comparing marker levels between samples from a subject taken at different times. The markers identified may also be drug development targets for the diseases. The protein markers can be used to screen compounds for biological activity against the diseases, which may be included with a carrier in pharmaceutical compositions useful to treat the disease states. The markers are useful to screen candidate compounds for detection of or therapeutic activity against disease states, and to identify biological pathways involved in disease states. They are also useful to identify synergistic agents which may be included in pharmaceutical compositions (all claimed).

Dwg.0/10

ACCESSION NUMBER: 2002-362307 [39] WPIDS  
DOC. NO. CPI: C2002-102544  
TITLE: New **non-genetic** based protein disease markers for obesity, osteoporosis, diabetes, osteoarthritis and **hypertension**, useful in diagnosis and monitoring of treatment for these diseases and to screen for therapeutic compounds.  
DERWENT CLASS: B04 D16  
INVENTOR(S): ANDERSON, N L; MYERS, T G; PIEPER, R; STEINER, S; TAYLOR, J; MYERS, T; REMBERT, P  
PATENT ASSIGNEE(S): (ANDE-I) ANDERSON N L; (MYER-I) MYERS T G; (PIEP-I) PIEPER R; (STEI-I) STEINER S; (TAYL-I) TAYLOR J; (LARG-N) LARGE SCALE PROTEOMICS CORP  
COUNTRY COUNT: 97  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
-----					
WO 2002022165	A1	20020321	(200239)*	EN	63
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ					
NL OA PT SD SE SL SZ TR TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK					
DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR					
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO					
RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
US 2002072492	A1	20020613	(200243)		
AU 2001088973	A	20020326	(200251)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
-----			
WO 2002022165	A1	WO 2001-US28268	20010912
US 2002072492	A1 CIP of	US 2000-660242	20000912
		US 2001-886271	20010622
AU 2001088973	A	AU 2001-88973	20010912

FILING DETAILS:

PATENT NO	KIND	PATENT NO
-----		
AU 2001088973	A Based on	WO 2002022165

PRIORITY APPLN. INFO: US 2001-886271 20010622; US 2000-660242  
20000912

L14 ANSWER 2 OF 9 USPATFULL on STN

TI Novel 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 and 49933 molecules and uses therefor

AB The invention provides isolated nucleic acids molecules, designated 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 and 49933 nucleic acid molecules. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 gene has been introduced or disrupted. The invention still further provides isolated 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 proteins, fusion proteins, antigenic peptides and anti-25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 antibodies. Diagnostic and therapeutic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:12981 USPATFULL  
TITLE: Novel 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 and 49933 molecules and uses therefor  
INVENTOR(S): Curtis, Rory A. J., Ashland, MA, UNITED STATES  
Logan, Thomas Joseph, Springfield, PA, UNITED STATES  
Glucksmann, Maria Alexandra, Lexington, MA, UNITED STATES  
Meyers, Rachel E., Newton, MA, UNITED STATES  
Williamson, Mark J., Saugus, MA, UNITED STATES  
Rudolph-Owen, Laura A., Medford, MA, UNITED STATES  
Chun, Miyoung, Belmont, MA, UNITED STATES  
Tsai, Fong-Ying, Newton, MA, UNITED STATES  
PATENT ASSIGNEE(S): Millennium Pharmaceuticals, Inc. (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004009501	A1	20040115
APPLICATION INFO.:	US 2003-377072	A1	20030227 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2001-895860, filed on 29 Jun 2001, PENDING Continuation-in-part of Ser. No. US 2000-723806, filed on 28 Nov 2000, PENDING Continuation-in-part of Ser. No. US 2001-843297, filed on 25 Apr 2001, GRANTED, Pat. No. US 6569667 Continuation-in-part of Ser. No. US 2001-861801, filed on 21 May 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-816494, filed on 23 Mar 2001, PENDING Continuation-in-part of Ser. No. US 2001-888911, filed on 25 Jun 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-908664, filed on 17 Jul 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-935291, filed on 21 Aug 2001, ABANDONED		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-215370P	20000629 (60)
	US 2000-187455P	20000307 (60)
	US 2000-199801P	20000426 (60)
	US 2000-205508P	20000519 (60)
	US 2000-213688P	20000623 (60)
	US 2000-218675P	20000717 (60)
	US 2000-250932P	20001130 (60)
	US 2000-226504P	20000821 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Jean M. Silveri, 75 Sidney Street, Cambridge, MA, 02139	
NUMBER OF CLAIMS:	19	

EXEMPLARY CLAIM: 1  
LINE COUNT: 16123  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 3 OF 9 USPATFULL on STN

TI Novel 27875, 22025 ,27420, 17906, 16319, 55092 and 10218 molecules and  
uses therefor

AB The invention provides isolated nucleic acids molecules, designated  
27875, 22025, 27420, 16319, 55092 and 10218 nucleic acid molecules. The  
invention also provides antisense nucleic acid molecules, recombinant  
expression vectors containing 27875, 22025, 27420, 16319, 55092 and  
10218 nucleic acid molecules, host cells into which the expression  
vectors have been introduced, and nonhuman transgenic animals in which a  
27875, 22025, 27420, 16319, 55092 and 10218 gene has been introduced or  
disrupted. The invention still further provides isolated 27875, 22025,  
27420, 17906, 16319, 55092 or 10218 proteins, fusion proteins, antigenic  
peptides and anti-27875, 22025, 27420, 17906, 16319, 55092 or 10218  
antibodies. Diagnostic and therapeutic methods utilizing compositions of  
the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:7776 USPATFULL

TITLE: Novel 27875, 22025 ,27420, 17906, 16319, 55092 and  
10218 molecules and uses therefor

INVENTOR(S): Kapeller-Libermann, Rosana, Chestnut Hill, MA, UNITED  
STATES

White, David, Braintree, MA, UNITED STATES

Robison, Keith E., Wilmington, MA, UNITED STATES

MacBeth, Kyle J., Boston, MA, UNITED STATES

Carroll, Joseph M., Cambridge, MA, UNITED STATES

Cook, William James, Hanover, NH, UNITED STATES

Meyers, Rachel E., Newton, MA, UNITED STATES

Chun, Miyoung, Belmont, MA, UNITED STATES

Williamson, Mark J., Saugus, MA, UNITED STATES

PATENT ASSIGNEE(S): Millennium Pharmaceuticals, Inc. (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004006016	A1	20040108
APPLICATION INFO.:	US 2003-386414	A1	20030311 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1999-426282, filed on 25 Oct 1999, ABANDONED Continuation-in-part of Ser. No. US 2000-668266, filed on 22 Sep 2000, ABANDONED Continuation-in-part of Ser. No. US 1999-330970, filed on 11 Jun 1999, GRANTED, Pat. No. US 6146876 Continuation-in-part of Ser. No. US 2000-724599, filed on 28 Nov 2000, PENDING Continuation-in-part of Ser. No. US 2001-860193, filed on 16 May 2001, PENDING Continuation-in-part of Ser. No. US 2000-571689, filed on 16 May 2000, ABANDONED Continuation-in-part of Ser. No. US 2002-283023, filed on 29 Oct 2002, PENDING Continuation-in-part of Ser. No. US 2001-10943, filed on 6 Dec 2001, PENDING Continuation-in-part of Ser. No. US 2001-833082, filed on 10 Apr 2001, ABANDONED		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-335044P	20011031 (60)
	US 2000-254037P	20001207 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: Millennium Pharmaceuticals, Inc., 75 Sidney Street,  
Cambridge, MA, 02139

NUMBER OF CLAIMS: 18



EXEMPLARY CLAIM: 1  
LINE COUNT: 25349  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 4 OF 9 USPATFULL on STN

TI Novel 38594, 57312, 53659, 57250, 63760, 49938, 32146, 57259, 67118, 67067, 62092, 8099, 46455, 54414, 53763, 67076, 67102, 44181, 67084FL, 67084ALT, FBH58295FL, 57255, and 57255alt molecules and uses therefor

AB The invention provides isolated nucleic acids molecules, designated 38594, 57312, 53659, 57250, 63760, 49938, 32146, 57259, 67118, 67067, 62092, 8099, 46455, 54414, 53763, 67076, 67102, 44181, 67084FL, 67084ALT, FBH58295FL, 57255, and 57255alt nucleic acid molecules, which encode transporter molecules, including sugar transporters, organic anion transporters, amino acid transporters, and phospholipid transporters. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing 38594, 57312, 53659, 57250, 63760, 49938, 32146, 57259, 67118, 67067, 62092, 8099, 46455, 54414, 53763, 67076, 67102, 44181, 67084FL, 67084ALT, FBH58295FL, 57255, and 57255alt nucleic acid molecules, host cells into which the expression vectors have been introduced, and non-human transgenic animals in which a 38594, 57312, 53659, 57250, 63760, 49938, 32146, 57259, 67118, 67067, 62092, 8099, 46455, 54414, 53763, 67076, 67102, 44181, 67084FL, 67084ALT, FBH58295FL, 57255, and 57255alt gene has been introduced or disrupted. The invention still further provides isolated 38594, 57312, 53659, 57250, 63760, 49938, 32146, 57259, 67118, 67067, 62092, 8099, 46455, 54414, 53763, 67076, 67102, 44181, 67084FL, 67084ALT, FBH58295FL, 57255, and 57255alt polypeptides, fusion polypeptides, antigenic peptides and anti-38594, 57312, 53659, 57250, 63760, 49938, 32146, 57259, 67118, 67067, 62092, 8099, 46455, 54414, 53763, 67076, 67102, 44181, 67084FL, 67084ALT, FBH58295FL, 57255, and 57255alt antibodies. Diagnostic and therapeutic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:207317 USPATFULL  
TITLE: Novel 38594, 57312, 53659, 57250, 63760, 49938, 32146, 57259, 67118, 67067, 62092, 8099, 46455, 54414, 53763, 67076, 67102, 44181, 67084FL, 67084ALT, FBH58295FL, 57255, and 57255alt molecules and uses therefor

INVENTOR(S): Curtis, Rory A.J., Framingham, MA, UNITED STATES  
Glucksmann, Maria Alexandra, Lexington, MA, UNITED STATES  
Meyers, Rachel E., Newton, MA, UNITED STATES

PATENT ASSIGNEE(S): Millennium Pharmaceuticals, Inc., Cambridge, MA (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003143675	A1	20030731
APPLICATION INFO.:	US 2002-154419	A1	20020522 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2001-858194, filed on 14 May 2001, PENDING Continuation-in-part of Ser. No. US 2001-895811, filed on 29 Jun 2001, PENDING Continuation-in-part of Ser. No. US 2001-919781, filed on 31 Jul 2001, PENDING Continuation-in-part of Ser. No. US 2001-957664, filed on 19 Sep 2001, PENDING Continuation-in-part of Ser. No. US 2001-964295, filed on 25 Sep 2001, PENDING Continuation-in-part of Ser. No. US 2001-972724, filed on 5 Oct 2001, PENDING Continuation-in-part of Ser. No. US 2001-2769, filed on 14 Nov 2001, PENDING Continuation-in-part of Ser. No. US 2001-24623, filed on 17 Dec 2001, PENDING Continuation-in-part of Ser. No. US 2002-55025, filed on 22 Jan 2002, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-204211P	20000512 (60)
	US 2000-215376P	20000629 (60)
	US 2000-221769P	20000731 (60)
	US 2000-233790P	20000919 (60)
	US 2000-235107P	20000925 (60)
	US 2000-238336P	20001005 (60)
	US 2000-248364P	20001114 (60)
	US 2000-248878P	20001115 (60)
	US 2000-256240P	20001215 (60)
	US 2000-256588P	20001218 (60)
	US 2000-258028P	20001221 (60)
	US 2001-263169P	20010122 (60)
	US 2001-263169P	20010122 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Intellectual Property Group, MILLENNIUM PHARMACEUTICALS, INC., 75 Sidney Street, Cambridge, MA, 02139	
NUMBER OF CLAIMS:	23	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	252 Drawing Page(s)	
LINE COUNT:	45817	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L14 ANSWER 5 OF 9 USPATFULL on STN

TI 68723, sodium/glucose cotransporter family members and uses therefor  
AB The invention provides isolated nucleic acids molecules, designated  
68723 nucleic acid molecules, which encode novel sodium/glucose  
cotransporter family members. The invention also provides antisense  
nucleic acid molecules, recombinant expression vectors containing 68723  
nucleic acid molecules, host cells into which the expression vectors  
have been introduced, and nonhuman transgenic animals in which a 68723  
gene has been introduced or disrupted. The invention still further  
provides isolated 68723 proteins, fusion proteins, antigenic peptides  
and anti-68723 antibodies. Diagnostic and therapeutic methods utilizing  
compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:78533 USPATFULL  
TITLE: 68723, sodium/glucose cotransporter family members and  
uses therefor  
INVENTOR(S): Curtis, Rory A.J., Framingham, MA, UNITED STATES  
Chen, Hong, Newton, MA, UNITED STATES  
PATENT ASSIGNEE(S): Millennium Pharmaceuticals, Inc. (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003054453	A1	20030320
APPLICATION INFO.:	US 2002-119988	A1	20020410 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-282764P	20010410 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Jean M. Silveri, MILLENNIUM PHARMACEUTICALS, INC., 75 Sidney Street, Cambridge, MA, 02139	
NUMBER OF CLAIMS:	43	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	3 Drawing Page(s)	
LINE COUNT:	6315	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 6 OF 9 USPATFULL on STN

TI 18607, a novel human calcium channel

AB The invention provides isolated nucleic acids molecules, designated TLCC nucleic acid molecules, which encode novel TRP-like calcium channel molecules. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing TLCC nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a TLCC gene has been introduced or disrupted. The invention still further provides isolated TLCC proteins, fusion proteins, antigenic peptides and anti-TLCC antibodies. Diagnostic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:258807 USPATFULL

TITLE: 18607, a novel human calcium channel

INVENTOR(S): Glucksmann, Maria Alexandra, Lexington, MA, UNITED STATES

Curtis, Rory A.J., Southborough, MA, UNITED STATES  
Lora, Jose M., Arlington, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002142377	A1	20021003
APPLICATION INFO.:	US 2001-789481	A1	20010220 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2000-634669, filed on 8 Aug 2000, PENDING Continuation-in-part of Ser. No. US 2000-583373, filed on 31 May 2000, PENDING Continuation-in-part of Ser. No. US 2000-510706, filed on 22 Feb 2000, PENDING		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109		
NUMBER OF CLAIMS:	44		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	26 Drawing Page(s)		
LINE COUNT:	5230		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 7 OF 9 USPATFULL on STN

TI 25869, a novel human carboxylesterase and uses thereof

AB The invention provides isolated nucleic acid molecules, designated COE-1 nucleic acid molecules, which encode novel carboxylesterase family members. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing COE-1 nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a COE-1 gene has been introduced or disrupted. The invention still further provides isolated COE-1 proteins, fusion proteins, antigenic peptides and anti-COE-1 antibodies. Diagnostic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:148643 USPATFULL

TITLE: 25869, a novel human carboxylesterase and uses thereof

INVENTOR(S): Curtis, Rory A.J., Southborough, MA, UNITED STATES  
Logan, Thomas Joseph, Needham, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002076786	A1	20020620
APPLICATION INFO.:	US 2001-895860	A1	20010629 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-215370P	20000629 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109	
NUMBER OF CLAIMS:	32	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	9 Drawing Page(s)	
LINE COUNT:	5139	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 8 OF 9 USPATFULL on STN

TI **Non-genetic** based protein disease markers  
 AB Protein disease markers for obesity, osteoporosis, diabetes, osteoarthritis and **hypertension** are disclosed. These markers are not inherited or of genetic origin as they were not found in identical twins of the affected individual. Methods and uses for diagnostic, therapeutic and drug discovery are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:141506 USPATFULL  
 TITLE: **Non-genetic** based protein disease markers  
 INVENTOR(S): Myers, Timothy G., Kensington, MD, UNITED STATES  
 Pieper, Rembert, Washington, DC, UNITED STATES  
 Taylor, John, JR., Clayton, NC, UNITED STATES  
 Steiner, Sandra, Gaithersburg, MD, UNITED STATES  
 Anderson, N. Leigh, Washington, DC, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002072492	A1	20020613
APPLICATION INFO.:	US 2001-886271	A1	20010622 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2000-660242, filed on 12 Sep 2000, PENDING		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	Dean H. Nakamura, Roylance Abrams Berdo & Goodman, 1300 19th Street, N.W., Washington, DC, 20036		
NUMBER OF CLAIMS:	55		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	10 Drawing Page(s)		
LINE COUNT:	1425		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 9 OF 9 USPATFULL on STN

TI Methods and compositions for elucidating relative protein expression levels in cells  
 AB The present invention relates generally to methods and compositions for the identification of differential protein expression patterns and concomitantly the active genetic regions that are directly or indirectly involved in different tissue types, disease states, or other cellular differences desirable for diagnosis or for targets for drug therapy.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2001:188396 USPATFULL  
 TITLE: Methods and compositions for elucidating relative protein expression levels in cells  
 INVENTOR(S): Link, Charles J., Des Moines, IA, United States  
 Seregina, Tatiana, Ames, IA, United States  
 Vahanian, Nicholas N., Ames, IA, United States  
 Higginbotham, James N., Ames, IA, United States  
 Ramsey, W. Jay, Ames, IA, United States

Powers, Bradley J., Ames, IA, United States  
Shulka, Sachet A., Ames, IA, United States  
Young, Won Bin, Ames, IA, United States

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2001034028	A1	20011025
APPLICATION INFO.:	US 2001-811842	A1	20010319 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-190678P	20000320 (60)
	US 2000-198722P	20000420 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	ZARLEY MCKEE THOMTE VOORHEES & SEASE PLC, SUITE 3200, 801 GRAND AVENUE, DES MOINES, IA, 50309-2721	
NUMBER OF CLAIMS:	52	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	23 Drawing Page(s)	
LINE COUNT:	2290	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d his

(FILE 'HOME' ENTERED AT 13:10:45 ON 12 MAR 2004)

FILE 'MEDLINE, BIOSIS, BIOBUSINESS, WPIDS, FSTA, JICST-EPLUS, EMBASE,  
DGENE, USPATFULL' ENTERED AT 13:11:13 ON 12 MAR 2004

L1 2389 S PROTEIN MARKER  
L2 368909 S OBESITY  
L3 845017 S HYPERTENSION  
L4 1028410 S DIABETES  
L5 270109 S OSTEOARTHRITIS  
L6 232226 S OSTEOPOROSIS  
L7 218 S L1 AND L2  
L8 0 S L1 () L3  
L9 267 S L1 AND L3  
L10 308 S L1 AND L4  
L11 226 S L1 AND L5  
L12 209 S L1 AND L6  
L13 8 S L7 AND NON-GENETIC  
L14 9 S L9 AND NON-GENETIC

=> s l10 and NON-GENETIC

L15 9 L10 AND NON-GENETIC

=> d l15 ti abs ibib tot

L15 ANSWER 1 OF 9 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN  
TI New **non-genetic** based protein disease markers for  
obesity, osteoporosis, **diabetes**, osteoarthritis and hypertension,  
useful in diagnosis and monitoring of treatment for these diseases and to  
screen for therapeutic compounds.  
AN 2002-362307 [39] WPIDS  
AB WO 200222165 A UPAB: 20020621  
NOVELTY - **Non-genetic** based protein disease markers  
for obesity, osteoporosis, **diabetes**, osteoarthritis and  
hypertension, are new.  
DETAILED DESCRIPTION - **Non-genetic** based protein  
disease markers for obesity, osteoporosis, **diabetes**,  
osteoarthritis and hypertension, are new, where markers for obesity (n=34),  
osteoporosis (n=20), **diabetes** (n=9), osteoarthritis (n=1) and

hypertension (n=9) are listed in the specification.

INDEPENDENT CLAIMS are also included for the following:

(1) determining a disease state of a subject suspected of having obesity, osteoporosis, **diabetes**, osteoarthritis or hypertension comprising:

(a) obtaining a sample containing protein;  
(b) measuring levels of protein markers of the disease state, where the markers are given in the specification; and  
(c) comparing with levels in controls from disease-free subjects/control standards;  
(2) binding reagents specific for the proteins, optionally bound to a detectable label;

(3) a standardized two-dimensional electrophoretic protein distribution from a sample (optionally human serum) from a subject having obesity, osteoporosis, **diabetes**, osteoarthritis or hypertension (and optionally being treated with pharmaceuticals);

(4) protein markers comprising a composition of two or more proteins which individually do not have significantly different levels between disease/control samples in a method as in (1), but produce a combined value which is significantly different, and methods and binding reagents as in (1) and (2) relating to the markers;

(5) protein submarkers not altered statistically significantly in the method as in (1) but altered in tandem/opposite in level and direction to protein markers, and methods and binding reagents as in (1) and (2) relating to the markers;

(6) generating an index marker for a particular physiological state comprising:

(a) determining protein markers that differ between samples from a subject with a disease state and a control sample;

(b) selecting two or more of the markers;

(c) combining the values for the markers and determining where the combination of values is altered in a manner of greater statistical significance;

(7) index markers comprising two or more protein markers determined by (6);

(8) cloning a gene encoding a **protein marker** comprising:

(a) determining a partial amino acid sequence of the protein;

(b) deducing a nucleotide sequence for a gene encoding the protein;  
and

(c) isolating or synthesizing a gene encoding the nucleotide sequence; and

(9) polynucleotides encoding the proteins, and antisense sequences inhibiting gene expression.

ACTIVITY - Anorectic; osteopathic; antidiabetic; antiarthritic; hypotensive. No biological data is given.

MECHANISM OF ACTION - None given.

USE - The markers and a new method are useful to diagnose obesity, osteoporosis, **diabetes**, osteoarthritis or hypertension in individuals. Marker levels may also be used to determine disease severity. The markers and method can also be used to monitor the efficacy of therapy for the conditions, by comparing marker levels between samples from a subject taken at different times. The markers identified may also be drug development targets for the diseases. The protein markers can be used to screen compounds for biological activity against the diseases, which may be included with a carrier in pharmaceutical compositions useful to treat the disease states. The markers are useful to screen candidate compounds for detection of or therapeutic activity against disease states, and to identify biological pathways involved in disease states. They are also useful to identify synergistic agents which may be included in pharmaceutical compositions (all claimed).

Dwg.0/10

ACCESSION NUMBER: 2002-362307 [39] WPIDS  
DOC. NO. CPI: C2002-102544



TITLE: New **non-genetic** based protein disease markers for obesity, osteoporosis, **diabetes**, osteoarthritis and hypertension, useful in diagnosis and monitoring of treatment for these diseases and to screen for therapeutic compounds.

DERWENT CLASS: B04 D16

INVENTOR(S): ANDERSON, N L; MYERS, T G; PIEPER, R; STEINER, S; TAYLOR, J; MYERS, T; REMBERT, P

PATENT ASSIGNEE(S): (ANDE-I) ANDERSON N L; (MYER-I) MYERS T G; (PIEP-I) PIEPER R; (STEI-I) STEINER S; (TAYL-I) TAYLOR J; (LARG-N) LARGE SCALE PROTEOMICS CORP

COUNTRY COUNT: 97

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002022165	A1	20020321	(200239)*	EN	63
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
US 2002072492	A1	20020613	(200243)		
AU 2001088973	A	20020326	(200251)		

#### APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002022165	A1	WO 2001-US28268	20010912
US 2002072492	A1 CIP of	US 2000-660242	20000912
		US 2001-886271	20010622
AU 2001088973	A	AU 2001-88973	20010912

#### FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001088973	A Based on	WO 2002022165

PRIORITY APPLN. INFO: US 2001-886271 20010622; US 2000-660242 20000912

L15 ANSWER 2 OF 9 USPATFULL on STN

TI Novel 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 and 49933 molecules and uses therefor

AB The invention provides isolated nucleic acids molecules, designated 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 and 49933 nucleic acid molecules. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 gene has been introduced or disrupted. The invention still further provides isolated 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 proteins, fusion proteins, antigenic peptides and anti-25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 antibodies. Diagnostic and therapeutic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:12981 USPATFULL  
 TITLE: Novel 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 and 49933 molecules and uses therefor  
 INVENTOR(S): Curtis, Rory A. J., Ashland, MA, UNITED STATES  
 Logan, Thomas Joseph, Springfield, PA, UNITED STATES  
 Glucksmann, Maria Alexandra, Lexington, MA, UNITED STATES  
 Meyers, Rachel E., Newton, MA, UNITED STATES  
 Williamson, Mark J., Saugus, MA, UNITED STATES  
 Rudolph-Owen, Laura A., Medford, MA, UNITED STATES  
 Chun, Miyoung, Belmont, MA, UNITED STATES  
 Tsai, Fong-Ying, Newton, MA, UNITED STATES  
 PATENT ASSIGNEE(S): Millennium Pharmaceuticals, Inc. (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004009501	A1	20040115
APPLICATION INFO.:	US 2003-377072	A1	20030227 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2001-895860, filed on 29 Jun 2001, PENDING Continuation-in-part of Ser. No. US 2000-723806, filed on 28 Nov 2000, PENDING Continuation-in-part of Ser. No. US 2001-843297, filed on 25 Apr 2001, GRANTED, Pat. No. US 6569667 Continuation-in-part of Ser. No. US 2001-861801, filed on 21 May 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-816494, filed on 23 Mar 2001, PENDING Continuation-in-part of Ser. No. US 2001-888911, filed on 25 Jun 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-908664, filed on 17 Jul 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-935291, filed on 21 Aug 2001, ABANDONED		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-215370P	20000629 (60)
	US 2000-187455P	20000307 (60)
	US 2000-199801P	20000426 (60)
	US 2000-205508P	20000519 (60)
	US 2000-213688P	20000623 (60)
	US 2000-218675P	20000717 (60)
	US 2000-250932P	20001130 (60)
	US 2000-226504P	20000821 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Jean M. Silveri, 75 Sidney Street, Cambridge, MA, 02139	
NUMBER OF CLAIMS:	19	
EXEMPLARY CLAIM:	1	
LINE COUNT:	16123	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L15 ANSWER 3 OF 9 USPATFULL on STN  
 TI Novel 27875, 22025, 27420, 17906, 16319, 55092 and 10218 molecules and uses therefor  
 AB The invention provides isolated nucleic acids molecules, designated 27875, 22025, 27420, 16319, 55092 and 10218 nucleic acid molecules. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing 27875, 22025, 27420, 16319, 55092 and 10218 nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a 27875, 22025, 27420, 16319, 55092 and 10218 gene has been introduced or disrupted. The invention still further provides isolated 27875, 22025, 27420, 17906, 16319, 55092 or 10218 proteins, fusion proteins, antigenic peptides and anti-27875, 22025, 27420, 17906, 16319, 55092 or 10218

antibodies. Diagnostic and therapeutic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:7776 USPATFULL  
TITLE: Novel 27875, 22025, 27420, 17906, 16319, 55092 and 10218 molecules and uses therefor  
INVENTOR(S): Kapeller-Libermann, Rosana, Chestnut Hill, MA, UNITED STATES  
White, David, Braintree, MA, UNITED STATES  
Robison, Keith E., Wilmington, MA, UNITED STATES  
MacBeth, Kyle J., Boston, MA, UNITED STATES  
Carroll, Joseph M., Cambridge, MA, UNITED STATES  
Cook, William James, Hanover, NH, UNITED STATES  
Meyers, Rachel E., Newton, MA, UNITED STATES  
Chun, Miyoung, Belmont, MA, UNITED STATES  
Williamson, Mark J., Saugus, MA, UNITED STATES  
PATENT ASSIGNEE(S): Millennium Pharmaceuticals, Inc. (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004006016	A1	20040108
APPLICATION INFO.:	US 2003-386414	A1	20030311 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1999-426282, filed on 25 Oct 1999, ABANDONED Continuation-in-part of Ser. No. US 2000-668266, filed on 22 Sep 2000, ABANDONED Continuation-in-part of Ser. No. US 1999-330970, filed on 11 Jun 1999, GRANTED, Pat. No. US 6146876 Continuation-in-part of Ser. No. US 2000-724599, filed on 28 Nov 2000, PENDING Continuation-in-part of Ser. No. US 2001-860193, filed on 16 May 2001, PENDING Continuation-in-part of Ser. No. US 2000-571689, filed on 16 May 2000, ABANDONED Continuation-in-part of Ser. No. US 2002-283023, filed on 29 Oct 2002, PENDING Continuation-in-part of Ser. No. US 2001-10943, filed on 6 Dec 2001, PENDING Continuation-in-part of Ser. No. US 2001-833082, filed on 10 Apr 2001, ABANDONED		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-335044P	20011031 (60)
	US 2000-254037P	20001207 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Millennium Pharmaceuticals, Inc., 75 Sidney Street, Cambridge, MA, 02139	
NUMBER OF CLAIMS:	18	
EXEMPLARY CLAIM:	1	
LINE COUNT:	25349	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 4 OF 9 USPATFULL on STN

TI Novel 38594, 57312, 53659, 57250, 63760, 49938, 32146, 57259, 67118, 67067, 62092, 8099, 46455, 54414, 53763, 67076, 67102, 44181, 67084FL, 67084ALT, FBH58295FL, 57255, and 57255alt molecules and uses therefor

AB The invention provides isolated nucleic acids molecules, designated 38594, 57312, 53659, 57250, 63760, 49938, 32146, 57259, 67118, 67067, 62092, 8099, 46455, 54414, 53763, 67076, 67102, 44181, 67084FL, 67084ALT, FBH58295FL, 57255, and 57255alt nucleic acid molecules, which encode transporter molecules, including sugar transporters, organic anion transporters, amino acid transporters, and phospholipid transporters. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing 38594, 57312, 53659, 57250, 63760, 49938, 32146, 57259, 67118, 67067, 62092, 8099,

46455, 54414, 53763, 67076, 67102, 44181, 67084FL, 67084ALT, FBH58295FL, 57255, and 57255alt nucleic acid molecules, host cells into which the expression vectors have been introduced, and non-human transgenic animals in which a 38594, 57312, 53659, 57250, 63760, 49938, 32146, 57259, 67118, 67067, 62092, 8099, 46455, 54414, 53763, 67076, 67102, 44181, 67084FL, 67084ALT, FBH58295FL, 57255, and 57255alt gene has been introduced or disrupted. The invention still further provides isolated 38594, 57312, 53659, 57250, 63760, 49938, 32146, 57259, 67118, 67067, 62092, 8099, 46455, 54414, 53763, 67076, 67102, 44181, 67084FL, 67084ALT, FBH58295FL, 57255, and 57255alt polypeptides, fusion polypeptides, antigenic peptides and anti-38594, 57312, 53659, 57250, 63760, 49938, 32146, 57259, 67118, 67067, 62092, 8099, 46455, 54414, 53763, 67076, 67102, 44181, 67084FL, 67084ALT, FBH58295FL, 57255, and 57255alt antibodies. Diagnostic and therapeutic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:207317 USPATFULL

TITLE: Novel 38594, 57312, 53659, 57250, 63760, 49938, 32146, 57259, 67118, 67067, 62092, 8099, 46455, 54414, 53763, 67076, 67102, 44181, 67084FL, 67084ALT, FBH58295FL, 57255, and 57255alt molecules and uses therefor

INVENTOR(S): Curtis, Rory A.J., Framingham, MA, UNITED STATES  
Glucksmann, Maria Alexandra, Lexington, MA, UNITED STATES  
Meyers, Rachel E., Newton, MA, UNITED STATES

PATENT ASSIGNEE(S): Millennium Pharmaceuticals, Inc., Cambridge, MA (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003143675	A1	20030731
APPLICATION INFO.:	US 2002-154419	A1	20020522 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2001-858194, filed on 14 May 2001, PENDING Continuation-in-part of Ser. No. US 2001-895811, filed on 29 Jun 2001, PENDING Continuation-in-part of Ser. No. US 2001-919781, filed on 31 Jul 2001, PENDING Continuation-in-part of Ser. No. US 2001-957664, filed on 19 Sep 2001, PENDING Continuation-in-part of Ser. No. US 2001-964295, filed on 25 Sep 2001, PENDING Continuation-in-part of Ser. No. US 2001-972724, filed on 5 Oct 2001, PENDING Continuation-in-part of Ser. No. US 2001-2769, filed on 14 Nov 2001, PENDING Continuation-in-part of Ser. No. US 2001-24623, filed on 17 Dec 2001, PENDING Continuation-in-part of Ser. No. US 2002-55025, filed on 22 Jan 2002, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-204211P	20000512 (60)
	US 2000-215376P	20000629 (60)
	US 2000-221769P	20000731 (60)
	US 2000-233790P	20000919 (60)
	US 2000-235107P	20000925 (60)
	US 2000-238336P	20001005 (60)
	US 2000-248364P	20001114 (60)
	US 2000-248878P	20001115 (60)
	US 2000-256240P	20001215 (60)
	US 2000-256588P	20001218 (60)
	US 2000-258028P	20001221 (60)
	US 2001-263169P	20010122 (60)
	US 2001-263169P	20010122 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION  
LEGAL REPRESENTATIVE: Intellectual Property Group, MILLENNIUM  
PHARMACEUTICALS, INC., 75 Sidney Street, Cambridge, MA,  
02139  
NUMBER OF CLAIMS: 23  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 252 Drawing Page(s)  
LINE COUNT: 45817  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 5 OF 9 USPATFULL on STN

TI 68723, sodium/glucose cotransporter family members and uses therefor  
AB The invention provides isolated nucleic acids molecules, designated  
68723 nucleic acid molecules, which encode novel sodium/glucose  
cotransporter family members. The invention also provides antisense  
nucleic acid molecules, recombinant expression vectors containing 68723  
nucleic acid molecules, host cells into which the expression vectors  
have been introduced, and nonhuman transgenic animals in which a 68723  
gene has been introduced or disrupted. The invention still further  
provides isolated 68723 proteins, fusion proteins, antigenic peptides  
and anti-68723 antibodies. Diagnostic and therapeutic methods utilizing  
compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:78533 USPATFULL  
TITLE: 68723, sodium/glucose cotransporter family members and  
uses therefor  
INVENTOR(S): Curtis, Rory A.J., Framingham, MA, UNITED STATES  
Chen, Hong, Newton, MA, UNITED STATES  
PATENT ASSIGNEE(S): Millennium Pharmaceuticals, Inc. (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003054453	A1	20030320
APPLICATION INFO.:	US 2002-119988	A1	20020410 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-282764P	20010410 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Jean M. Silveri, MILLENNIUM PHARMACEUTICALS, INC., 75 Sidney Street, Cambridge, MA, 02139	
NUMBER OF CLAIMS:	43	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	3 Drawing Page(s)	
LINE COUNT:	6315	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 6 OF 9 USPATFULL on STN

TI 18607, a novel human calcium channel  
AB The invention provides isolated nucleic acids molecules, designated TLCC  
nucleic acid molecules, which encode novel TRP-like calcium channel  
molecules. The invention also provides antisense nucleic acid molecules,  
recombinant expression vectors containing TLCC nucleic acid molecules,  
host cells into which the expression vectors have been introduced, and  
nonhuman transgenic animals in which a TLCC gene has been introduced or  
disrupted. The invention still further provides isolated TLCC proteins,  
fusion proteins, antigenic peptides and anti-TLCC antibodies. Diagnostic  
methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:258807 USPATFULL  
TITLE: 18607, a novel human calcium channel

INVENTOR(S) :                   Glucksmann, Maria Alexandra, Lexington, MA, UNITED STATES  
                                 Curtis, Rory A.J., Southborough, MA, UNITED STATES  
                                 Lora, Jose M., Arlington, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002142377	A1	20021003
APPLICATION INFO.:	US 2001-789481	A1	20010220 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2000-634669, filed on 8 Aug 2000, PENDING Continuation-in-part of Ser. No. US 2000-583373, filed on 31 May 2000, PENDING Continuation-in-part of Ser. No. US 2000-510706, filed on 22 Feb 2000, PENDING		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109		
NUMBER OF CLAIMS:	44		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	26 Drawing Page(s)		
LINE COUNT:	5230		
CAS INDEXING IS AVAILABLE FOR THIS PATENT.			

L15 ANSWER 7 OF 9 USPATFULL on STN

TI       25869, a novel human carboxylesterase and uses thereof  
AB       The invention provides isolated nucleic acid molecules, designated COE-1 nucleic acid molecules, which encode novel carboxylesterase family members. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing COE-1 nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a COE-1 gene has been introduced or disrupted. The invention still further provides isolated COE-1 proteins, fusion proteins, antigenic peptides and anti-COE-1 antibodies. Diagnostic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:       2002:148643 USPATFULL  
TITLE:                25869, a novel human carboxylesterase and uses thereof  
INVENTOR(S) :         Curtis, Rory A.J., Southborough, MA, UNITED STATES  
                         Logan, Thomas Joseph, Needham, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002076786	A1	20020620
APPLICATION INFO.:	US 2001-895860	A1	20010629 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-215370P	20000629 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109	
NUMBER OF CLAIMS:	32	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	9 Drawing Page(s)	
LINE COUNT:	5139	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L15 ANSWER 8 OF 9 USPATFULL on STN

TI       **Non-genetic** based protein disease markers  
AB       Protein disease markers for obesity, osteoporosis, **diabetes**, osteoarthritis and hypertension are disclosed. These markers are not inherited or of genetic origin as they were not found in identical twins



of the affected individual. Methods and uses for diagnostic, therapeutic and drug discovery are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:141506 USPATFULL

TITLE: **Non-genetic** based protein disease markers

INVENTOR(S): Myers, Timothy G., Kensington, MD, UNITED STATES  
Pieper, Rembert, Washington, DC, UNITED STATES  
Taylor, John, JR., Clayton, NC, UNITED STATES  
Steiner, Sandra, Gaithersburg, MD, UNITED STATES  
Anderson, N. Leigh, Washington, DC, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002072492	A1	20020613
APPLICATION INFO.:	US 2001-886271	A1	20010622 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2000-660242, filed on 12 Sep 2000, PENDING		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	Dean H. Nakamura, Roylance Abrams Berdo & Goodman, 1300 19th Street, N.W., Washington, DC, 20036		
NUMBER OF CLAIMS:	55		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	10 Drawing Page(s)		
LINE COUNT:	1425		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 9 OF 9 USPATFULL on STN

TI Methods and compositions for elucidating relative protein expression levels in cells

AB The present invention relates generally to methods and compositions for the identification of differential protein expression patterns and concomitantly the active genetic regions that are directly or indirectly involved in different tissue types, disease states, or other cellular differences desirable for diagnosis or for targets for drug therapy.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2001:188396 USPATFULL

TITLE: Methods and compositions for elucidating relative protein expression levels in cells

INVENTOR(S): Link, Charles J., Des Moines, IA, United States  
Seregina, Tatiana, Ames, IA, United States  
Vahanian, Nicholas N., Ames, IA, United States  
Higginbotham, James N., Ames, IA, United States  
Ramsey, W. Jay, Ames, IA, United States  
Powers, Bradley J., Ames, IA, United States  
Shulka, Sachet A., Ames, IA, United States  
Young, Won Bin, Ames, IA, United States

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2001034028	A1	20011025
APPLICATION INFO.:	US 2001-811842	A1	20010319 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-190678P	20000320 (60)
	US 2000-198722P	20000420 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	ZARLEY MCKEE THOMTE VOORHEES & SEASE PLC, SUITE 3200, 801 GRAND AVENUE, DES MOINES, IA, 50309-2721	

NUMBER OF CLAIMS: 52  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 23 Drawing Page(s)  
LINE COUNT: 2290  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d his

(FILE 'HOME' ENTERED AT 13:10:45 ON 12 MAR 2004)

FILE 'MEDLINE, BIOSIS, BIOBUSINESS, WPIDS, FSTA, JICST-EPLUS, EMBASE, DGENE, USPATFULL' ENTERED AT 13:11:13 ON 12 MAR 2004

L1 2389 S PROTEIN MARKER  
L2 368909 S OBESITY  
L3 845017 S HYPERTENSION  
L4 1028410 S DIABETES  
L5 270109 S OSTEOARTHRITIS  
L6 232226 S OSTEOPOROSIS  
L7 218 S L1 AND L2  
L8 0 S L1 () L3  
L9 267 S L1 AND L3  
L10 308 S L1 AND L4  
L11 226 S L1 AND L5  
L12 209 S L1 AND L6  
L13 8 S L7 AND NON-GENETIC  
L14 9 S L9 AND NON-GENETIC  
L15 9 S L10 AND NON-GENETIC

=> s l11 and NON-GENETIC

L16 2 L11 AND NON-GENETIC

=> d l16 ti abs ibib tot

L16 ANSWER 1 OF 2 USPATFULL on STN

TI Novel 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 and 49933 molecules and uses therefor

AB The invention provides isolated nucleic acids molecules, designated 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 and 49933 nucleic acid molecules. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 gene has been introduced or disrupted. The invention still further provides isolated 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 proteins, fusion proteins, antigenic peptides and anti-25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 antibodies. Diagnostic and therapeutic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:12981 USPATFULL

TITLE: Novel 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 and 49933 molecules and uses therefor

INVENTOR(S): Curtis, Rory A. J., Ashland, MA, UNITED STATES  
Logan, Thomas Joseph, Springfield, PA, UNITED STATES  
Glucksmann, Maria Alexandra, Lexington, MA, UNITED STATES  
Meyers, Rachel E., Newton, MA, UNITED STATES  
Williamson, Mark J., Saugus, MA, UNITED STATES

PATENT ASSIGNEE(S): Rudolph-Owen, Laura A., Medford, MA, UNITED STATES  
Chun, Miyoung, Belmont, MA, UNITED STATES  
Tsai, Fong-Ying, Newton, MA, UNITED STATES  
Millennium Pharmaceuticals, Inc. (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004009501	A1	20040115
APPLICATION INFO.:	US 2003-377072	A1	20030227 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2001-895860, filed on 29 Jun 2001, PENDING Continuation-in-part of Ser. No. US 2000-723806, filed on 28 Nov 2000, PENDING Continuation-in-part of Ser. No. US 2001-843297, filed on 25 Apr 2001, GRANTED, Pat. No. US 6569667 Continuation-in-part of Ser. No. US 2001-861801, filed on 21 May 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-816494, filed on 23 Mar 2001, PENDING Continuation-in-part of Ser. No. US 2001-888911, filed on 25 Jun 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-908664, filed on 17 Jul 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-935291, filed on 21 Aug 2001, ABANDONED		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-215370P	20000629 (60)
	US 2000-187455P	20000307 (60)
	US 2000-199801P	20000426 (60)
	US 2000-205508P	20000519 (60)
	US 2000-213688P	20000623 (60)
	US 2000-218675P	20000717 (60)
	US 2000-250932P	20001130 (60)
	US 2000-226504P	20000821 (60)

DOCUMENT TYPE: Utility  
FILE SEGMENT: APPLICATION  
LEGAL REPRESENTATIVE: Jean M. Silveri, 75 Sidney Street, Cambridge, MA, 02139  
NUMBER OF CLAIMS: 19  
EXEMPLARY CLAIM: 1  
LINE COUNT: 16123  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 2 OF 2 USPATFULL on STN  
TI **Non-genetic** based protein disease markers  
AB Protein disease markers for obesity, osteoporosis, diabetes, **osteoarthritis** and hypertension are disclosed. These markers are not inherited or of genetic origin as they were not found in identical twins of the affected individual. Methods and uses for diagnostic, therapeutic and drug discovery are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
ACCESSION NUMBER: 2002:141506 USPATFULL  
TITLE: **Non-genetic** based protein disease markers

INVENTOR(S): Myers, Timothy G., Kensington, MD, UNITED STATES  
Pieper, Rembert, Washington, DC, UNITED STATES  
Taylor, John, JR., Clayton, NC, UNITED STATES  
Steiner, Sandra, Gaithersburg, MD, UNITED STATES  
Anderson, N. Leigh, Washington, DC, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002072492	A1	20020613
APPLICATION INFO.:	US 2001-886271	A1	20010622 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2000-660242, filed		

on 12 Sep 2000, PENDING  
DOCUMENT TYPE: Utility  
FILE SEGMENT: APPLICATION  
LEGAL REPRESENTATIVE: Dean H. Nakamura, Roylance Abrams Berdo & Goodman, 1300  
19th Street, N.W., Washington, DC, 20036  
NUMBER OF CLAIMS: 55  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 10 Drawing Page(s)  
LINE COUNT: 1425  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d his

(FILE 'HOME' ENTERED AT 13:10:45 ON 12 MAR 2004)

FILE 'MEDLINE, BIOSIS, BIOBUSINESS, WPIDS, FSTA, JICST-EPLUS, EMBASE,  
DGENE, USPATFULL' ENTERED AT 13:11:13 ON 12 MAR 2004

L1 2389 S PROTEIN MARKER  
L2 368909 S OBESITY  
L3 845017 S HYPERTENSION  
L4 1028410 S DIABETES  
L5 270109 S OSTEOARTHRITIS  
L6 232226 S OSTEOPOROSIS  
L7 218 S L1 AND L2  
L8 0 S L1 () L3  
L9 267 S L1 AND L3  
L10 308 S L1 AND L4  
L11 226 S L1 AND L5  
L12 209 S L1 AND L6  
L13 8 S L7 AND NON-GENETIC  
L14 9 S L9 AND NON-GENETIC  
L15 9 S L10 AND NON-GENETIC  
L16 2 S L11 AND NON-GENETIC

=> s l12 and NON-GENETIC

L17 4 L12 AND NON-GENETIC

=> d l17 ti abs ibib tot

L17 ANSWER 1 OF 4 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN  
TI New **non-genetic** based protein disease markers for  
obesity, **osteoporosis**, diabetes, osteoarthritis and hypertension,  
useful in diagnosis and monitoring of treatment for these diseases and to  
screen for therapeutic compounds.  
AN 2002-362307 [39] WPIDS  
AB WO 200222165 A UPAB: 20020621  
NOVELTY - **Non-genetic** based protein disease markers  
for obesity, **osteoporosis**, diabetes, osteoarthritis and  
hypertension, are new.  
DETAILED DESCRIPTION - **Non-genetic** based protein  
disease markers for obesity, **osteoporosis**, diabetes,  
osteoarthritis and hypertension, are new, where markers for obesity (n=34),  
**osteoporosis** (n=20), diabetes (n=9), osteoarthritis (n=1) and  
hypertension (n=9) are listed in the specification.  
INDEPENDENT CLAIMS are also included for the following:  
(1) determining a disease state of a subject suspected of having  
obesity, **osteoporosis**, diabetes, osteoarthritis or hypertension  
comprising:  
(a) obtaining a sample containing protein;  
(b) measuring levels of protein markers of the disease state, where  
the markers are given in the specification; and  
(c) comparing with levels in controls from disease-free  
subjects/control standards;

(2) binding reagents specific for the proteins, optionally bound to a detectable label;

(3) a standardized two-dimensional electrophoretic protein distribution from a sample (optionally human serum) from a subject having obesity, **osteoporosis**, diabetes, osteoarthritis or hypertension (and optionally being treated with pharmaceuticals);

(4) protein markers comprising a composition of two or more proteins which individually do not have significantly different levels between disease/control samples in a method as in (1), but produce a combined value which is significantly different, and methods and binding reagents as in (1) and (2) relating to the markers;

(5) protein submarkers not altered statistically significantly in the method as in (1) but altered in tandem/opposite in level and direction to protein markers, and methods and binding reagents as in (1) and (2) relating to the markers;

(6) generating an index marker for a particular physiological state comprising:

(a) determining protein markers that differ between samples from a subject with a disease state and a control sample;

(b) selecting two or more of the markers;

(c) combining the values for the markers and determining where the combination of values is altered in a manner of greater statistical significance;

(7) index markers comprising two or more protein markers determined by (6);

(8) cloning a gene encoding a **protein marker** comprising:

(a) determining a partial amino acid sequence of the protein;

(b) deducing a nucleotide sequence for a gene encoding the protein; and

(c) isolating or synthesizing a gene encoding the nucleotide sequence; and

(9) polynucleotides encoding the proteins, and antisense sequences inhibiting gene expression.

ACTIVITY - Anorectic; osteopathic; antidiabetic; antiarthritic; hypotensive. No biological data is given.

MECHANISM OF ACTION - None given.

USE - The markers and a new method are useful to diagnose obesity, **osteoporosis**, diabetes, osteoarthritis or hypertension in individuals. Marker levels may also be used to determine disease severity. The markers and method can also be used to monitor the efficacy of therapy for the conditions, by comparing marker levels between samples from a subject taken at different times. The markers identified may also be drug development targets for the diseases. The protein markers can be used to screen compounds for biological activity against the diseases, which may be included with a carrier in pharmaceutical compositions useful to treat the disease states. The markers are useful to screen candidate compounds for detection of or therapeutic activity against disease states, and to identify biological pathways involved in disease states. They are also useful to identify synergistic agents which may be included in pharmaceutical compositions (all claimed).

Dwg.0/10

ACCESSION NUMBER: 2002-362307 [39] WPIDS

DOC. NO. CPI: C2002-102544

TITLE: New **non-genetic** based protein disease markers for obesity, **osteoporosis**, diabetes, osteoarthritis and hypertension, useful in diagnosis and monitoring of treatment for these diseases and to screen for therapeutic compounds.

DERWENT CLASS: B04 D16

INVENTOR(S): ANDERSON, N L; MYERS, T G; PIEPER, R; STEINER, S; TAYLOR, J; MYERS, T; REMBERT, P

PATENT ASSIGNEE(S): (ANDE-I) ANDERSON N L; (MYER-I) MYERS T G; (PIEP-I) PIEPER R; (STEI-I) STEINER S; (TAYL-I) TAYLOR J; (LARG-N)

## LARGE SCALE PROTEOMICS CORP

COUNTRY COUNT:

97

## PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
-----					
WO 2002022165	A1	20020321	(200239)*	EN	63
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ					
NL OA PT SD SE SL SZ TR TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK					
DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR					
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO					
RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
US 2002072492	A1	20020613	(200243)		
AU 2001088973	A	20020326	(200251)		

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
-----			
WO 2002022165	A1	WO 2001-US28268	20010912
US 2002072492	A1 CIP of	US 2000-660242	20000912
		US 2001-886271	20010622
AU 2001088973	A	AU 2001-88973	20010912

## FILING DETAILS:

PATENT NO	KIND	PATENT NO
-----		
AU 2001088973	A Based on	WO 2002022165

PRIORITY APPLN. INFO: US 2001-886271 20010622; US 2000-660242  
20000912

L17 ANSWER 2 OF 4 USPATFULL on STN

TI Novel 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 and 49933 molecules and uses therefor

AB The invention provides isolated nucleic acids molecules, designated 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 and 49933 nucleic acid molecules. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 gene has been introduced or disrupted. The invention still further provides isolated 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 proteins, fusion proteins, antigenic peptides and anti-25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 antibodies. Diagnostic and therapeutic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:12981 USPATFULL

TITLE: Novel 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 and 49933 molecules and uses therefor

INVENTOR(S): Curtis, Rory A. J., Ashland, MA, UNITED STATES  
Logan, Thomas Joseph, Springfield, PA, UNITED STATES  
Glucksmann, Maria Alexandra, Lexington, MA, UNITED STATES  
Meyers, Rachel E., Newton, MA, UNITED STATES  
Williamson, Mark J., Saugus, MA, UNITED STATES



PATENT ASSIGNEE(S): Rudolph-Owen, Laura A., Medford, MA, UNITED STATES  
Chun, Miyoung, Belmont, MA, UNITED STATES  
Tsai, Fong-Ying, Newton, MA, UNITED STATES  
Millennium Pharmaceuticals, Inc. (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004009501	A1	20040115
APPLICATION INFO.:	US 2003-377072	A1	20030227 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2001-895860, filed on 29 Jun 2001, PENDING Continuation-in-part of Ser. No. US 2000-723806, filed on 28 Nov 2000, PENDING Continuation-in-part of Ser. No. US 2001-843297, filed on 25 Apr 2001, GRANTED, Pat. No. US 6569667 Continuation-in-part of Ser. No. US 2001-861801, filed on 21 May 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-816494, filed on 23 Mar 2001, PENDING Continuation-in-part of Ser. No. US 2001-888911, filed on 25 Jun 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-908664, filed on 17 Jul 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-935291, filed on 21 Aug 2001, ABANDONED		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-215370P	20000629 (60)
	US 2000-187455P	20000307 (60)
	US 2000-199801P	20000426 (60)
	US 2000-205508P	20000519 (60)
	US 2000-213688P	20000623 (60)
	US 2000-218675P	20000717 (60)
	US 2000-250932P	20001130 (60)
	US 2000-226504P	20000821 (60)

DOCUMENT TYPE: Utility  
FILE SEGMENT: APPLICATION  
LEGAL REPRESENTATIVE: Jean M. Silveri, 75 Sidney Street, Cambridge, MA, 02139  
NUMBER OF CLAIMS: 19  
EXEMPLARY CLAIM: 1  
LINE COUNT: 16123  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L17 ANSWER 3 OF 4 USPATFULL on STN

TI Novel 27875, 22025 ,27420, 17906, 16319, 55092 and 10218 molecules and uses therefor

AB The invention provides isolated nucleic acids molecules, designated 27875, 22025, 27420, 16319, 55092 and 10218 nucleic acid molecules. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing 27875, 22025, 27420, 16319, 55092 and 10218 nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a 27875, 22025, 27420, 16319, 55092 and 10218 gene has been introduced or disrupted. The invention still further provides isolated 27875, 22025, 27420, 17906, 16319, 55092 or 10218 proteins, fusion proteins, antigenic peptides and anti-27875, 22025, 27420, 17906, 16319, 55092 or 10218 antibodies. Diagnostic and therapeutic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:7776 USPATFULL

TITLE: Novel 27875, 22025 ,27420, 17906, 16319, 55092 and 10218 molecules and uses therefor

INVENTOR(S): Kapeller-Libermann, Rosana, Chestnut Hill, MA, UNITED STATES  
White, David, Braintree, MA, UNITED STATES

Robison, Keith E., Wilmington, MA, UNITED STATES  
 MacBeth, Kyle J., Boston, MA, UNITED STATES  
 Carroll, Joseph M., Cambridge, MA, UNITED STATES  
 Cook, William James, Hanover, NH, UNITED STATES  
 Meyers, Rachel E., Newton, MA, UNITED STATES  
 Chun, Miyoung, Belmont, MA, UNITED STATES  
 Williamson, Mark J., Saugus, MA, UNITED STATES  
 PATENT ASSIGNEE(S): Millennium Pharmaceuticals, Inc. (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004006016	A1	20040108
APPLICATION INFO.:	US 2003-386414	A1	20030311 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1999-426282, filed on 25 Oct 1999, ABANDONED Continuation-in-part of Ser. No. US 2000-668266, filed on 22 Sep 2000, ABANDONED Continuation-in-part of Ser. No. US 1999-330970, filed on 11 Jun 1999, GRANTED, Pat. No. US 6146876 Continuation-in-part of Ser. No. US 2000-724599, filed on 28 Nov 2000, PENDING Continuation-in-part of Ser. No. US 2001-860193, filed on 16 May 2001, PENDING Continuation-in-part of Ser. No. US 2000-571689, filed on 16 May 2000, ABANDONED Continuation-in-part of Ser. No. US 2002-283023, filed on 29 Oct 2002, PENDING Continuation-in-part of Ser. No. US 2001-10943, filed on 6 Dec 2001, PENDING Continuation-in-part of Ser. No. US 2001-833082, filed on 10 Apr 2001, ABANDONED		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-335044P	20011031 (60)
	US 2000-254037P	20001207 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Millennium Pharmaceuticals, Inc., 75 Sidney Street, Cambridge, MA, 02139	
NUMBER OF CLAIMS:	18	
EXEMPLARY CLAIM:	1	
LINE COUNT:	25349	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L17 ANSWER 4 OF 4 USPATFULL on STN  
 TI **Non-genetic** based protein disease markers  
 AB Protein disease markers for obesity, **osteoporosis**, diabetes, osteoarthritis and hypertension are disclosed. These markers are not inherited or of genetic origin as they were not found in identical twins of the affected individual. Methods and uses for diagnostic, therapeutic and drug discovery are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:141506 USPATFULL  
 TITLE: **Non-genetic** based protein disease markers

INVENTOR(S): Myers, Timothy G., Kensington, MD, UNITED STATES  
 Pieper, Rembert, Washington, DC, UNITED STATES  
 Taylor, John, JR., Clayton, NC, UNITED STATES  
 Steiner, Sandra, Gaithersburg, MD, UNITED STATES  
 Anderson, N. Leigh, Washington, DC, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002072492	A1	20020613
APPLICATION INFO.:	US 2001-886271	A1	20010622 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2000-660242, filed		

on 12 Sep 2000, PENDING  
DOCUMENT TYPE: Utility  
FILE SEGMENT: APPLICATION  
LEGAL REPRESENTATIVE: Dean H. Nakamura, Roylance Abrams Berdo & Goodman, 1300  
19th Street, N.W., Washington, DC, 20036  
NUMBER OF CLAIMS: 55  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 10 Drawing Page(s)  
LINE COUNT: 1425  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

11AA\_SEQUENCE 1.0  
 ID APOH\_HUMAN STANDARD; PRT; 345 AA.  
 AC P02749;  
 DT 21-JUL-1986 (Rel. 01, Created)  
 DT 01-JUN-1994 (Rel. 29, Last sequence update)  
 DT 10-OCT-2003 (Rel. 42, Last annotation update)  
 DE Beta-2-glycoprotein I precursor (Apolipoprotein H) (Apo-H) (B2GPI)  
 DE (Beta(2)GPI) (Activated protein C-binding protein) (APC inhibitor).  
 GN APOH OR B2G1.  
 OS Homo sapiens (Human).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
 OX NCBI\_TaxID=9606;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RC TISSUE=Liver;  
 RX MEDLINE=91315408; PubMed=1650181;  
 RA Steinkasserer A., Estaller C., Weiss E., Sim R.B., Day A.J.;  
 RT "Complete nucleotide and deduced amino acid sequence of human beta 2-  
 RT glycoprotein I.";  
 RL Biochem. J. 277:387-391(1991).  
 RN [2]  
 RP SEQUENCE FROM N.A.  
 RC TISSUE=Liver;  
 RX MEDLINE=92008618; PubMed=1655523;  
 RA Kristensen T., Schousboe I., Boel E., Mulvihill E.M., Hansen R.R.,  
 RA Moeller K.B., Moeller N.P.H., Sottrup-Jensen L.;  
 RT "Molecular cloning and mammalian expression of human beta  
 RT 2-glycoprotein I cDNA.";  
 RL FEBS Lett. 289:183-186(1991).  
 RN [3]  
 RP SEQUENCE FROM N.A.  
 RC TISSUE=Liver;  
 RX MEDLINE=92084151; PubMed=1748314;  
 RA Mehdi H., Nunn M., Steel D.M., Whitehead A.S., Perez M., Walker L.,  
 RA Peoples M.E.;  
 RT "Nucleotide sequence and expression of the human gene encoding  
 RT apolipoprotein H (beta 2-glycoprotein I).";  
 RL Gene 108:293-298(1991).  
 RN [4]  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=92273779; PubMed=1339416;  
 RA Day J.R., O'Hara P.J., Grant F.J., Lofton-Day C.E., Berkaw M.N.,  
 RA Werner P., Arnaud P.;  
 RT "Molecular cloning and sequence analysis of the cDNA encoding human  
 RT apolipoprotein H (beta 2-glycoprotein I).";  
 RL Int. J. Clin. Lab. Res. 21:256-263(1992).  
 RN [5]  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=92135065; PubMed=1777418;  
 RA Matsura E., Igarashi M., Igarashi Y., Nagae H., Ichikawa K.,  
 RA Yasuda T., Koike T.;  
 RT "Molecular definition of human beta 2-glycoprotein I (beta 2-GPI) by  
 RT cDNA cloning and inter-species differences of beta 2-GPI in  
 RT alteration of anticardiolipin binding.";  
 RL Int. Immunol. 3:1217-1221(1991).  
 RN [6]  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=99115472; PubMed=9914524;  
 RA Okkels H., Rasmussen T.E., Sanghera D.K., Kamboh M.I., Kristensen T.;  
 RT "Structure of the human beta2-glycoprotein I (apolipoprotein H)  
 RT gene.";  
 RL Eur. J. Biochem. 259:435-440(1999).  
 RN [7]  
 RP SEQUENCE FROM N.A.  
 RC TISSUE=Liver;  
 RX MEDLINE=22388257; PubMed=12477932;  
 RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,  
 RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,  
 RA Altschul S.F., Zeeberg B., Buettow K.H., Schaefer C.F., Bhat N.K.,  
 RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,  
 RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,  
 RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Schetz T.E.,

RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,  
 RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mulvihill S.J.,  
 RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,  
 RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,  
 RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,  
 RA Fahey U., Helton E., Kettelman M., Madan A., Rodriguez S., Sanchez A.,  
 RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,  
 RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,  
 RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,  
 RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,  
 RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;  
 RT "Generation and initial analysis of more than 15,000 full-length  
 RT human and mouse cDNA sequences.";  
 RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).  
 RN [8]  
 RP SEQUENCE OF 20-345, CARBOHYDRATE-LINKAGE SITES, AND DISULFIDE BONDS.  
 RX MEDLINE=84222015; PubMed=6587378;  
 RA Lozier J., Takahashi N., Putnam F.W.;  
 RT "Complete amino acid sequence of human plasma beta 2-glycoprotein I.";  
 RL Proc. Natl. Acad. Sci. U.S.A. 81:3640-3644(1984).  
 RN [9]  
 RP SEQUENCE OF 20-38.  
 RC TISSUE=Follicular fluid;  
 RX MEDLINE=21148139; PubMed=11250549;  
 RA Aleporou-Marinou V., Pappa H., Yalouris P., Patargias T.;  
 RT "Purification of apolipoprotein H (beta 2-glycoprotein I)-like protein  
 RT from human follicular fluid.";  
 RL Comp. Biochem. Physiol. 128B:537-542(2001).  
 RN [10]  
 RP DISULFIDE BONDS IN C-TERMINAL DOMAIN.  
 RX MEDLINE=93050249; PubMed=1426288;  
 RA Steinkasserer A., Barlow P.N., Willis A.C., Kertesz Z.,  
 RA Campbell I.D., Sim R.B., Norman D.G.;  
 RT "Activity, disulphide mapping and structural modelling of the fifth  
 RT domain of human beta 2-glycoprotein I.";  
 RL FEBS Lett. 313:193-197(1992).  
 RN [11]  
 RP STRUCTURE OF CARBOHYDRATES.  
 RX MEDLINE=97299942; PubMed=915091;  
 RA Gambino R., Ruiu G., Pagano G., Cassader M.;  
 RT "Qualitative analysis of the carbohydrate composition of  
 RT apolipoprotein H.";  
 RL J. Protein Chem. 16:205-212(1997).  
 RN [12]  
 RP X-RAY CRYSTALLOGRAPHY (2.7 ANGSTROMS).  
 RC TISSUE=Plasma;  
 RX MEDLINE=99437994; PubMed=10508150;  
 RA Bouma B., de Groot P.G., van Den Elsen J.M.H., Ravelli R.B.G.,  
 RA Schouten A., Stimmelink M.J.A., Derksen R.H.W.M., Kroon J., Gros P.;  
 RT "Adhesion mechanism of human beta(2)-glycoprotein I to phospholipids  
 RT based on its crystal structure.";  
 RL EMBO J. 18:5166-5174(1999).  
 RN [13]  
 RP X-RAY CRYSTALLOGRAPHY (2.87 ANGSTROMS).  
 RX MEDLINE=20031634; PubMed=10562535;  
 RA Schwarzenbacher R., Zeth K., Diederichs K., Gries A., Kostner G.M.,  
 RA Lagnier P., Prassl R.;  
 RT "Crystal structure of human beta2-glycoprotein I: implications for  
 RT phospholipid binding and the antiphospholipid syndrome.";  
 RL EMBO J. 18:6228-6239(1999).  
 RN [14]  
 RP VARIANT LEU-266.  
 RX MEDLINE=93273313; PubMed=8099061;  
 RA Steinkasserer A., Doerner C., Wuerzner R., Sim R.B.;  
 RT "Human beta 2-glycoprotein I: molecular analysis of DNA and amino  
 RT acid polymorphism.";  
 RL Hum. Genet. 91:401-402(1993).  
 RN [15]  
 RP VARIANT ASN-107.  
 RX MEDLINE=97369481; PubMed=9225969;  
 RA Sanghera D.K., Kristensen T., Hamman R.F., Kamboh M.I.;  
 RT "Molecular basis of the apolipoprotein H (beta 2-glycoprotein I)  
 RT protein polymorphism.";

RL Hum. Genet. 100:57-62(1997).  
RN [16]  
RP VARIANTS GLY-325 AND SER-335.  
RX MEDLINE=97217791; PubMed=9063752;  
RA Sanghera D.K., Wagenknecht D.R., McIntyre J.A., Kamboh M.I.;  
RT "Identification of structural mutations in the fifth domain of  
RT apolipoprotein H (beta-2-glycoprotein I) which affect phospholipid  
RT binding.";  
RL Hum. Mol. Genet. 6:311-316(1997).  
CC -1- FUNCTION: Binds to various kinds of negatively charged substances  
CC such as heparin, phospholipids, and dextran sulfate. May prevent  
CC activation of the intrinsic blood coagulation cascade by binding  
CC to phospholipids on the surface of damaged cells.  
CC -1- SUBCELLULAR LOCATION: Secreted.  
CC -1- TISSUE SPECIFICITY: Expressed by the liver and secreted in plasma.  
CC -1- SIMILARITY: Contains 4 Sushi (SCR) domains.  
CC -----  
CC This SWISS-PROT entry is copyright. It is produced through a collaboration  
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -  
CC the European Bioinformatics Institute. There are no restrictions on its  
CC use by non-profit institutions as long as its content is in no way  
CC modified and this statement is not removed. Usage by and for commercial  
CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>  
CC or send an email to [license@isb-sib.ch](mailto:license@isb-sib.ch)).  
CC -----  
DR EMBL; X58100; CAA41113.1; -.  
DR EMBL; X53595; CAA37664.1; -.  
DR EMBL; X57847; CAA40977.1; -.  
DR EMBL; M62839; AAA51766.1; -.  
DR EMBL; S80305; AAB21330.1; -.  
DR EMBL; Y11493; CAA72279.1; -.  
DR EMBL; Y11494; CAA72279.1; JOINED.  
DR EMBL; Y11495; CAA72279.1; JOINED.  
DR EMBL; X53595; CAA72279.1; JOINED.  
DR EMBL; Y11496; CAA72279.1; JOINED.  
DR EMBL; Y11497; CAA72279.1; JOINED.  
DR EMBL; Y11498; CAA72279.1; JOINED.  
DR EMBL; Y17754; CAA76845.1; -.  
DR EMBL; BC020703; AAH20703.1; -.  
DR EMBL; BC026283; AAH26283.1; -.  
DR PIR; S17178; NBHU.  
DR PDB; 1QUB; 08-OCT-99.  
DR PDB; 1C1Z; 19-NOV-99.  
DR PDB; 1G4F; 28-MAR-01.  
DR PDB; 1G4G; 28-MAR-01.  
DR Genew; HGNC:616; APOH.  
DR MIM; 138700; -.  
DR InterPro; IPR000436; Sushi\_SCR\_CCP.  
DR Pfam; PF00084; sushi; 4.  
DR SMART; SM00032; CCP; 4.  
KW Heparin-binding; Glycoprotein; Plasma; Repeat; Sushi; Signal;  
KW Polymorphism; 3D-structure.  
FT SIGNAL 1 19  
FT CHAIN 20 345 BETA-2-GLYCOPROTEIN I.  
FT DOMAIN 22 80 SUSHI 1.  
FT DOMAIN 83 138 SUSHI 2.  
FT DOMAIN 141 201 SUSHI 3.  
FT DOMAIN 204 261 SUSHI 4.  
FT DOMAIN 263 345 SUSHI-LIKE.  
FT DISULFID 23 66  
FT DISULFID 51 79  
FT DISULFID 84 124  
FT DISULFID 110 137  
FT DISULFID 142 188  
FT DISULFID 174 200  
FT DISULFID 205 248  
FT DISULFID 234 260  
FT DISULFID 264 315  
FT DISULFID 300 325  
FT DISULFID 307 345  
FT CARBOHYD 149 149  
FT CARBOHYD 162 162  
FT CARBOHYD 183 183  
O-LINKED (GLCNAC. . .).  
N-LINKED (GLCNAC. . .).  
N-LINKED (GLCNAC. . .).

N-LINKED (GLCNAC. . .).  
N-LINKED (GLCNAC. . .).  
S -> N (in allele APOH\*1; dbSNP:1801692).  
/FTid=VAR\_008169.  
V -> L (in 23% of the population;  
dbSNP:4581).  
/FTid=VAR\_000673.  
C -> G (loss of phosphatidylserine-  
binding; dbSNP:1801689).  
/FTid=VAR\_008170.  
W -> S (in allele APOH\*3W; loss of  
phosphatidylserine-binding;  
dbSNP:1801690).  
/FTid=VAR\_008171.  
S -> C (IN REF. 8).  
C -> N (IN REF. 8).

FT CARBOHYD 193 193  
FT CARBOHYD 253 253  
FT VARIANT 107 107  
FT VARIANT 266 266  
FT VARIANT 325 325  
FT VARIANT 335 335  
FT CONFLICT 121 121  
FT CONFLICT 188 188  
FT STRAND 23 24  
FT TURN 30 31  
FT STRAND 32 35  
FT STRAND 40 41  
FT TURN 43 44  
FT STRAND 46 51  
FT TURN 53 54  
FT STRAND 55 57  
FT TURN 58 59  
FT STRAND 62 65  
FT TURN 68 69  
FT STRAND 79 81  
FT STRAND 83 83  
FT TURN 91 92  
FT STRAND 93 96  
FT STRAND 101 101  
FT TURN 102 103  
FT STRAND 105 110  
FT TURN 112 113  
FT STRAND 114 117  
FT STRAND 121 124  
FT TURN 126 127  
FT STRAND 130 131  
FT STRAND 136 139  
FT STRAND 141 142  
FT TURN 149 150  
FT STRAND 151 155  
FT STRAND 160 160  
FT TURN 161 162  
FT STRAND 163 165  
FT TURN 166 167  
FT STRAND 169 174  
FT TURN 176 177  
FT STRAND 178 181  
FT STRAND 185 188  
FT TURN 190 191  
FT STRAND 194 194  
FT STRAND 199 202  
FT STRAND 204 205  
FT TURN 212 213  
FT STRAND 214 217  
FT STRAND 224 225  
FT TURN 226 227  
FT STRAND 229 234  
FT TURN 236 237  
FT STRAND 238 240  
FT STRAND 245 248  
FT TURN 250 251  
FT STRAND 254 254  
FT STRAND 260 262  
FT STRAND 264 264  
FT STRAND 272 274  
FT STRAND 279 281  
FT HELIX 282 285  
FT TURN 286 288  
FT STRAND 290 290  
FT TURN 292 293

FT STRAND 295 302  
FT TURN 303 306  
FT STRAND 307 314  
FT STRAND 316 316  
FT TURN 317 318  
FT STRAND 319 319  
FT TURN 324 325  
SQ SEQUENCE 345 AA; 38298 MW; 63101704F8BDEE3F CRC64;

p02749 Length: 345 March 12, 2004 11:34 Type: P Check: 2134 ..

1 MISPLILFS SFLCHVAIAG RTCPKPDLP FSTVPLKTF YEPGEETYS  
51 CKPGYVSRGG MRKFCPLTG LMPINTLKCT PRVCPFAGIL ENGAVRYTTF  
101 EYPNTISFSC NTGFIYLGAD SAKCTEEGKM SPELPVCAP ICPPPSIPTF  
151 ATLRYVKPSA GNNSLYRDTA VFECLPQHAM FGNDTITCTT HGNTKLPBC  
201 REVKCPFPPSR PDNGFVNYPA KPTLYYKDKA TFGCHDGYSL DGPEETECTK  
251 LGNWSAMPSC KASCXVPYK ATVVYQGERV KIQEKFKNGM LHGDKVSFFC  
301 KNKEKKCSYT EDAQCIDGTI EVPKCFKEHS SLAFWKTDAS DVKPC